

AMENDMENT TO THE SPECIFICATION

Page 3, please amend the paragraph beginning at line 4, as follows:

In copending application Serial No. 09/497,850 filed on February 4, 2000, now U.S. Patent No. 6,383,925, a method is disclosed comprising treating the surface of a Cu or Cu alloy layer with a plasma containing nitrogen (N_2) and ammonia (NH_3), followed by depositing the capping layer in the presence of N_2 in the same reaction chamber for improved adhesion of the capping layer. However after further experimentation and investigation, it was found that capped Cu or Cu alloy interconnects, as in damascene and dual damascene structures, exhibited poor electromigration resistance, particular in those cases wherein the exposed surface of the Cu or Cu alloy was treated with a plasma to remove a copper oxide surface film prior to deposition of the capping layer, e.g., silicon nitride. Such poor electromigration resistance adversely impacts device reliability and results in poor product yield.

In copending application Serial No. 09/846,186 filed on May 2, 2001, now U.S. Patent No. 6,506,677, a method of plasma treating an upper surface of inlaid Cu or Cu alloy metallization is disclosed using a relatively soft NH_3 plasma treatment heavily diluted with N_2 , ramping up the introduction of silane (SiH_4) and then initiating plasma enhanced chemical vapor deposition (PECVD) while maintaining the same pressure during plasma treatment, SiH_4 ramp up and silicon nitride capping layer deposition, with an attendant significant improvement in electromigration resistance, within wafer uniformity and wafer-to-wafer uniformity.